

**Amendments to the Specification**

Please replace paragraph [0013] with the following rewritten paragraph:

**[0013]** (3) In the method for forming the bump, the insulating film may be thicker at the end-periphery than in the center of the pad.

Please replace paragraph [0015] with the following rewritten paragraph:

(4) In the method for forming the bump, the through hole may be formed ~~at the inner side~~ ~~efinside~~ the periphery of the pad and ~~at the outer side of~~ ~~at about~~ the center ~~of the pad~~, in which the insulating film is thinner, ~~ef the pad~~.

Please replace paragraph [0066], third sub-paragraph, with the following rewritten sub-paragraph:

Fig. 3(A) to Fig. 2(C)Fig. 3(C) show a method for forming a bump according to the first embodiment of the present invention.

Please replace paragraph [0066], fourteenth sub-paragraph, with the following rewritten sub-paragraph:

Fig. 14(A) and Fig. 14(B)Fig. 14(C) show a method for forming a bump according to the eighth embodiment of the present invention.

Please replace paragraph [0069] with the following rewritten paragraph:

**[0069]** In this embodiment, as shown in Fig. 1, a semiconductor chip 10 is prepared. The semiconductor chip 10 has a plurality of pads 12. The pads 12 function as electrodes of an integrated circuit formed inside the semiconductor chip 10. The pads 12 may be arranged at an end of the semiconductor chip 10 or in the center of the semiconductor chip 10. Also, the pads 12 may be arranged along two parallel ends or four ends when the semiconductor chip 10 is rectangular. The pads 12 may be formed in a region in which an integrated circuit is formed in the semiconductor chip 10. The pads 12 may be arranged as a matrix including a plurality of lines and rows. Each pad 12 is often formed so as to be thin and flat on the semiconductor chip

10. The side shape or the cross-sectional shape thereof are not limited, and the pad 12 may be flush with the face of the semiconductor chip 10. Also, the planar shape of the pads 12 is not limited and may be circular or rectangular. The pads 12 are formed of aluminum (Al), ~~Copper~~ copper (Cu) or the like. The pitch between individual pads 12 can be determined without restriction depending on the design. The present invention is particularly effective, for example, in a semiconductor chip 10 having pads 12 having a narrow pitch of approximately 40 $\mu$ m or less.

Please replace paragraph [0070] with the following rewritten paragraph:

**[0070]** An insulating film 14 is formed on a face provided with the pads 12 of the semiconductor chip 10. The insulating film 14 is formed so as to cover each pad 12. In this embodiment, the insulating film 14 is formed of a single layer, but may be formed of a plurality of layers, as shown in an example described below. The thickness of the insulating film 14 can be determined depending on the requirement without restriction. The insulating film 14 may be a general passivation film. The insulating film 14 can be formed of, for example, ~~SiO<sub>2</sub>SiO<sub>2</sub>~~, SiN, or a polyimide resin. In this embodiment, a step for exposing at least a part of each pad 12 from the insulating film 14 and a step for forming a bump on the pad 12 can be performed using the same resist layer 20. In detail, these steps can be performed using the same resist layer 20 formed for the first step, without forming resist layers 20 repeatedly.

Please replace paragraph [0087] with the following rewritten paragraph:

**[0087]** By the above steps, as shown in Fig. 4, a bump 40 formed of the first metal layer 30 and the optional second metal layer 32 (not shown) is formed on each pad 12 of the semiconductor chip 10. The semiconductor chip 10 as a flip chip can be face-down-bonded to a substrate. In such a case, a wiring pattern (a land) formed on the substrate and the bump 40 is electrically connected to each other. For electrical connection, conductive particles may be disposed between the bump 40 and the wiring pattern using an anisotropic conductive material,

such as an anisotropic conductive film (ACF) or an anisotropic conductive paste (ACP). Alternatively, the bump 40 and the wiring pattern (particularly the land) may be electrically connected by metallic connection of Au-Au, Au-Sn, or an solder (containing solder) or by shrinkage of an insulating resin.